

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing Of Claims:

1. (Withdrawn) A composition, comprising one or more polysaccharides and one or more therapeutic agents, wherein said composition enhances therapeutic efficacy and reduces toxicity associated with said therapeutics.

2. (Withdrawn) The composition of claim 1, wherein said polysaccharide is branched or unbranched.

3. (Withdrawn) The composition of claim 1, wherein said polysaccharide is selected from the group consisting of galactomannan, arabinogalactan, rhamnogalacturonan and a combination thereof.

4. (Withdrawn) The composition of claim 3, wherein said galactomannan is a β -1, 4-D-galactomannan.

5. (Withdrawn) The composition of claim 3, wherein said galactomannan is (((1, 4)-linked β -D-mannopyranose)₁₇ - ((1, 6)-linked- β -D- galactopyranose)₁₀)₁₂.

6. (Withdrawn) The composition of claim 5, wherein said (((1, 4)- linked β -D-mannopyranose)₁₇ - ((1, 6)-linked- β -D- galactopyranose)₁₀)₁₂ has a molecular weight ranging from about 2,000 Da to 600,000 Da.

7. (Withdrawn) The composition of claim 5, wherein said (((1,4)- linked β -D-mannopyranose)₁₇ - ((1, 6)-linked- β -D- galactopyranose)₁₀)₁₂) has a molecular weight ranging from about 50,000 Da to 415,000 Da.

8. (Withdrawn) The composition of claim 5, wherein said (((1, 4) linked β -D-mannopyranose)₁₇ - ((1, 6)-linked- β -D- galactopyranose)₁₀)₁₂) has a molecular weight ranging from about 4000 Da to 60,000 Da.

9. (Withdrawn) The composition of claim 1, wherein said therapeutic agent is selected from the group consisting of 5-FU, 5-FUdR, methotrexate, ara-C, 6-mercaptopurine, 6-thioguanine, hydroxyurea, vinblastine, vincristine, vindesine, mechlorethamine, phenylalanine mustard, chlorambucil, ethylenimines, methyl melamines, alkylsulfonates, carmustine, lomustine, streptozocin, cisplatin, dacarbazine, procarbazine, doxorubicin, dactinomycin, mitomycin C, plicamycin, cyclophosphamide, melphalan, thiotepa, busulfan, prednisone, prednisolone, triamcinolone, paclitaxel, and combinations thereof.

10. (Withdrawn) The composition of claim 9, wherein said therapeutic agent is selected from the group consisting of 5-FU, 5-FUdR, cisplatin, and combinations thereof.

11. (Withdrawn) The composition of claim 10, wherein said therapeutic agent is 5-FU.

12. (Withdrawn) The composition of claim 1 further comprising leucovorin.

13. (Currently Amended) A method for ~~treating cancer~~ improving biodistribution of a chemotherapeutic agent in a body, comprising:

Obtaining an admixture of (((1, 4)- linked β -D-mannopyranose)₁₇ - ((1, 6)-linked- β -D-galactopyranose)₁₀)₁₂) and a the chemotherapeutic agent in a pharmaceutically acceptable carrier;
and

increasing the efficacy of a cancer treatment by administering to the body an effective amount of the admixture so as to improve biodistribution of the chemotherapeutic agent in the body.

14. (Currently Amended) The method of claim 13, wherein said chemotherapeutic agent is selected from the group consisting of fluoropyrimidines ("5-FU"), 5-fluorodeoxyuridine ("5-FUdR"), methotrexate, ara-C, 6-mercaptopurine, 6-thioguanine, hydroxyurea, vinblastine, vincristine, vindesine, mechlorethamine, phenylalanine mustard, chlorambucil, ethylenimines, methyl melamines, alkylsulfonates, carmustine, lomustine, streptozocin, cisplatin, dacarbazine, procarbazine, doxorubicin, dactinomycin, mitomycin C, plicamycin, cyclophosphamide, melphalan, thiotepa, busulfan, prednisone, prednisolone, triamcinolone, paclitaxel, and combinations thereof.

15. (Currently Amended) The method of claim 13, wherein said chemotherapeutic agent is selected from the group consisting of fluoropyrimidines ("5-FU"), 5-fluorodeoxyuridine ("5-FUdR"), cisplatin, and combinations thereof.

16. (Canceled)

17. (Currently Amended) The method of claim 13 further comprising leucovorin.

18. (Canceled)

19. (Currently Amended) The method of claim 13, wherein said admixture has an amount of said (((1, 4)- linked β -D-mannopyranose)₁₇ - ((1, 6)-linked- β -D-galactopyranose)₁₀)₁₂) and an amount of said chemotherapeutic agent in a ratio-suitable-for reducing toxicity experienced by said subject between about 10:1 to 1:10

20. (Currently Amended) The method of claim 13, wherein said admixture has an amount of said (((1, 4)- linked β -D-mannopyranose)₁₇ - ((1, 6)-linked- β -D-galactopyranose)₁₀)₁₂) and an amount of said chemotherapeutic agent in a ratio-suitable-for enhancing the therapeutic efficacy of said chemotherapeutic agent between about 6:1 to 1:3.

21. (Canceled)

22. (Currently Amended) ~~The method of claim 13, wherein said admixture has an amount of said (((1, 4)- linked β -D-mannopyranose)₁₇ - ((1, 6)- linked β -D-galactopyranose)₁₀)₁₂)~~ A method for improving the biodistribution of a chemotherapeutic agent in a body, comprising:

And Obtaining an admixture of (((1, 4)- linked β -D-mannopyranose)₁₇ - ((1, 6)-linked- β -D- galactopyranose)₁₀)₁₂), the chemotherapeutic agent and a proteinous chemotherapeutic; and

Administering to the body an effective amount of the admixture so as to improve the biodistribution of the proteinous chemotherapeutic in the body, -and chemotherapeutic agent, in a ratio-suitable-for reducing toxicity in said subject.

23. (Currently Amended) The method of treatment of claim 4322, wherein said admixture has an amount of said proteinous chemotherapeutic is a cytokine (((1, 4)-linked β -D-mannopyranose)_{1,7}—((1, 6)-linked β -D-galactopyranose)₁₀)_{1,2}) and an amount and said chemotherapeutic agent in a ratio suitable for reducing toxicity experienced by said subject.

24. (Currently Amended) The method of treatment of claim 4322, wherein said proteinous chemotherapeutic agent is selected from the group consisting of interleukin-2 ("IL-2"), interleukin-12 ("IL-12"), or α -interferon or both. admixture has an amount of said (((1, 4)-linked β -D-mannopyranose)_{1,7}—((1, 6)-linked β -D-galactopyranose)₁₀)_{1,2}) and an amount of cytokine and said chemotherapeutic agent in a ratio suitable for enhancing the efficacy of said chemotherapeutic agent

25. (Currently Amended) The method of treatment of claim 4322, wherein said chemotherapeutic agent is selected from the group consisting of fluoropyrimidines ("5-FU"), 5-fluorodeoxyuridine ("5-FuDR"), methotrexate, ara-C, 6-mercaptopurine, 6-thioguanine, hydroxyurea, vinblastine, vincristine, vindesine, mechlorethamine, phenylalanine mustard, chlorambucil, ethylenimines, methyl melamines, alkylsulfonates, carmustine, lomustine, streptozocin, cisplatin, dacarbazine, procarbazine, doxorubicin, dactinomycin, mitomycin C, plicamycin, cyclophosphamide, melphalan, thiotepa, busulfan, prednisone, prednisolone, triamcinolone, paclitaxel, and combinations thereof.

26. (New) The method of treatment of claim 22, wherein said chemotherapeutic agent is selected from the group consisting of fluoropyrimidines ("5-FU"), 5-fluorodeoxyuridine ("5-FuDR"), cisplatin, and combinations thereof.

27. (New) The method of treatment of claim 22, wherein said chemotherapeutic agent is a fluoropyrimidine ("5-FU").

28. (New) The method of treatment of claim 22, further comprising leucovorin.

29. (New) A method for improving the biodistribution of a proteinous chemotherapeutic in a body, comprising:

Obtaining an admixture of a proteinous chemotherapeutic and (((1, 4)- linked β -D-mannopyranose)₁₇ - ((1, 6)-linked- β -D- galactopyranose)₁₀)₁₂ in a pharmaceutically acceptable carrier; and

administering to the body an effective amount of the admixture so as to improve the biodistribution of the proteinous chemotherapeutic in the body.

30. (New) The method of claim 29 where said proteinous chemotherapeutic is selected from the group consisting of cytokine, chemokine, interleukin-2 ("IL-2"), interleukin-12 ("IL-12"), α -interferon, immune system messengers or both.